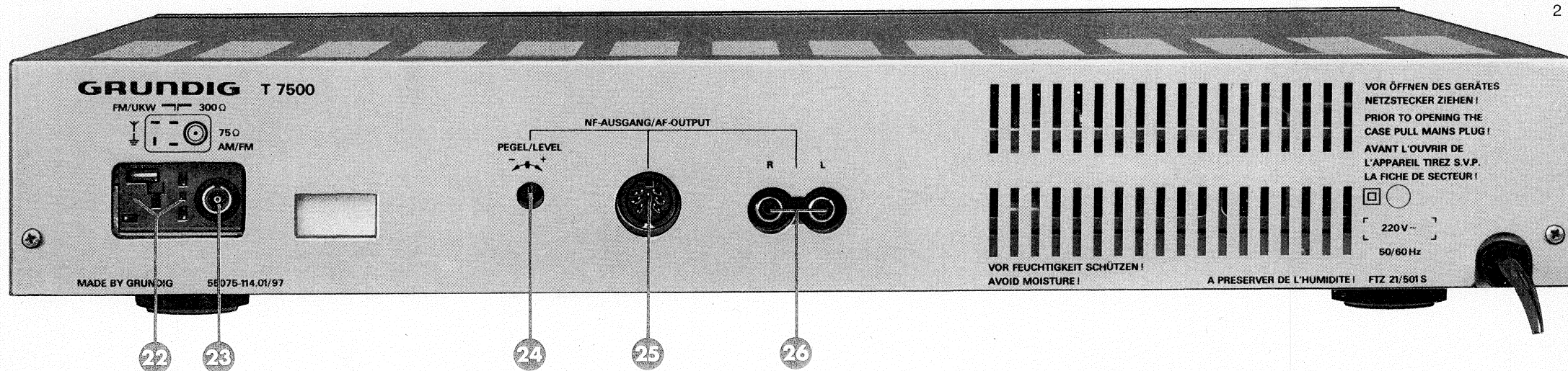


GRUNDIG T 7500

Operating instructions
Mode d'emploi
Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo





MADE BY GRUNDIG

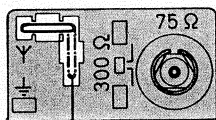
55 075-114.01/97

VOR ÖFFNEN DES GERÄTES
NETZSTECKER ZIEHEN!
PRIOR TO OPENING THE
CASE PULL MAINS PLUG!
AVANT L'OUVRIR DE
L'APPAREIL TIREZ S.V.P.
LA FICHE DE SECTEUR!

220V~
50/60 Hz

VOR FEUCHTIGKEIT SCHÜTZEN!
AVOID MOISTURE!

A PRÉSERVER DE L'HUMIDITÉ! FTZ 21/501 S



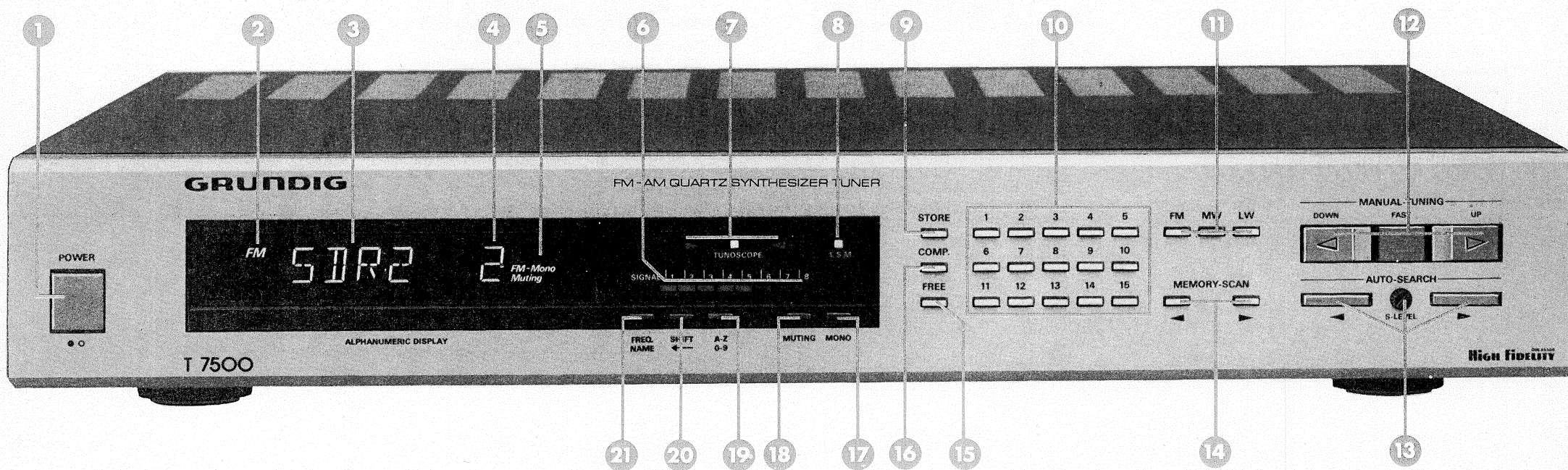
Wire bridge horizontal = AM and FM (300 Ω and 75 Ω)
aerials connected.
Wire bridge vertical = aerials separated.

Boucle en position horizontale = antennes AM et FM
(300 Ω et 75 Ω) internément liées.
Boucle en position verticale = antennes AM et FM
séparées.

Ponticello in posizione orizzontale = antenne AM e FM
(300 Ω e 75 Ω) collegate internamente.
Ponticello in posizione verticale = antenne AM e FM
separate.

Draadbrug horizontaal = antennes voor AM en FM
(300 Ω en 75 Ω) doorverbonden.
Draadbrug verticaal = antennes gescheiden.

Puente de alambre horizontal = antenas para AM y FM
(300 Ω y 75 Ω) unidas.
Puente de alambre vertical = antenas separadas.





This tuner contains a microcomputer which controls not only all the tuning operations of the high-precision synthesiser, but also quickly and effectively processes the data for up to 15 preset VHF, MW or LW stations.

Among the extra operating facilities of the T 7500 are:

- Manual tuning either in discrete steps or in large steps for high speed.
- Automatic station location (self-seek) in both directions with an automatic check on the reception quality of each station located.
- A memory which can be programmed for up to 15 stations (VHF, MW or LW).
- Memory facility for station abbreviations containing up to 4 letters and/or figures which appears immediately whenever the corresponding station is selected (alphanumeric station identification).
- GRUNDIG TUNOSCOPE® as an aid to precise tuning of stations.
- Pre-programming of mono or stereo reception in the case of VHF stations.
- High dynamic selectivity for VHF stations, even if the signal strength is high.
- Switchable muting on all wavebands.
- Memory scan for rapidly reviewing and selecting the preset stations.
- FREE button for indicating unallocated preset station numbers.
- Compare function for preventing allocation of more than one station number to the same station. When a station is located by the automatic location system, the result of comparing the memory contents is automatically shown immediately after the check phase.
- Non-volatile memory which does not require a battery. The data in the memory is retained even if there is a mains failure.

Controls and Sockets

The controls of the T 7500 are so designed that buttons used frequently have a bright finish, while subsidiary function buttons are coloured an unobtrusive black.

1 Mains (POWER) Switch

Button pressed in = tuner on
Button released = tuner off

2 Selected Waveband Display

FM = VHF
MW = medium wave
LW = long wave

3 Display

For indicating the frequency tuned to or the station abbreviation, and various information on the station numbers, viz. NEW, FREE (= not allocated), FULL.

4 Display showing the function being performed or the station number.

HA = manual tuning
AS = automatic station location
CH = station check after automatic location

5 Illuminated Display indicating:

STORE = Memory ready to receive data
FM STEREO = Stereo reception
FM MONO = Mono reception
MUTING = Muting

6 Tuning Meter

Indicates signal-strength (AM) or fieldstrength (VHF).

7 TUNOSCOPE

The central green light comes on when tuning is precise.

8 L.S.M. (Last Station Memory) Indicator

This must light up before the tuner is switched off if the same station is to come back on automatically when the set is switched on again.

9 STORE Button

Press to enter station information in memory before allocating a number to the station.

10 Station Selection Buttons

For selecting the pre-set stations 1 - 15.

11 Waveband Selection Buttons

FM = VHF
MW = medium wave
LW = long wave

12 Manual Tuning Buttons

Press DOWN button to reduce frequency, press UP button to increase frequency. In each case the rate of tuning can be increased by pressing the centre button (FAST) as well.

13 Start Buttons for Automatic Station Location (AUTO-SEARCH):

Press ◀ to decrease frequency, press ▶ to increase frequency. (With control for adjusting station location threshold in middle).

14 MEMORY-SCAN Buttons

To review the allocated station numbers in sequence press one of these buttons:

◀ = review in decreasing sequence
▶ = review in increasing sequence.

15 FREE Button

Checks through pre-set stations and shows any unallocated numbers in the display 4. Can also be used to erase data from memory when pressed after pressing the STORE button.

16 COMP. Button

Compares any frequency tuned to with those of stations already in the memory, and if it has already been entered, indicates the station number allocated. If it is not yet stored in the memory, the word NEW will appear in the display.

17 MONO Button

For switching over to mono reception on VHF, eg: if stereo broadcasts are subject to interference.

18 MUTING Button

For muting the sound between stations when tuning.

19 A - Z/0 - 9 Button

Press to enter a station abbreviation with the tuning buttons 12.




20 SHIFT Button

Moves the station abbreviation symbols entered in the display 3 one place to the left.

21 FREQ./NAME Button

Switches the station display from station abbreviation to frequency and vice versa.

22 Sockets for AM aerial

(LW and MW) , earth  and 300 Ω VHF dipole .

23 Coaxial socket for 75 Ω aerial.

24 Level Control

For adjusting output voltages at sockets 25 and 26.

25 DIN Output Socket

For (pre)amplifier

26 Phono Sockets

For (pre)amplifier.

Positioning

If hifi units are placed above each other in racks, in cabinets or in table-top racks, the amplifier or preamplifier should always be at the top.

In the GRUNDIG hifi range you will find suitable racks and Compact Systems for your GRUNDIG hifi units. Your dealer will be pleased to advise you.

Important:

Do not site mains cables near audio input leads such as those from the record deck, cassette deck, tuner or loudspeakers.

Mains Connection

The tuner is designed to operate only from AC mains (50/60 Hz). The mains voltage to which it is adjusted in the factory is specified on the back of the set. Changes to other voltages should only be carried out by the dealer in accordance with the data given in the set.

Additional Information for Sets Used in Great Britain

We recommend that a 13 amp 3-pin plug fitted with a 3 amp fuse be used. The brown lead must be connected to the live pin (marked "L" or "red" or "brown") and the blue to the neutral pin (marked "N" or "black" or "blue"). On no account should either wire be connected to the earth pin (marked "E" or "green/yellow"). If other mains plugs are used, ensure that they are protected with a 3 amp fuse.

Sets sold in Great Britain are suitable for operation from a mains supply of 240 V AC.

Connection to an Amplifier

There is a choice of two outputs for connecting to an amplifier:

- The DIN socket 25 with adjustable output voltage. To match the tuner to amplifiers made by other manufacturers, the output voltage can be varied between 175 and 1500 mV with 40 kHz deviation and 1000 Hz modulation using the level control 24. With this control in its centre lock-in position the output voltage is 800 mV. A suitable connecting cable is supplied with the tuner (GRUNDIG cable 379a).

- The two phono sockets 24. These are in parallel with the DIN socket 25 and the output level can therefore also be adjusted with control 24.


A control voltage is available at the DIN output socket which allows suitably designed (pre)amplifiers to be switched on and off together with the tuner. Example of a suitable unit the GRUNDIG is XV 7500. The GRUNDIG cable 392 (included with the amplifiers), which has the necessary control lead in it, may be used for connection.



If required, the output sockets can be used for recording on tape. The DIN socket 25 provides an output of 0.87 mV/k Ω (for 40 kHz deviation and 1 kHz modulation frequency). The phono socket 24 may be used as a voltage source for high-level recordings (800 mV with the level control 24 in the central lock-in position).

Aerials

In good reception areas or in the neighbourhood of transmitters it is possible to obtain good reception with a simple room dipole, eg: the GRUNDIG VHF indoor aerial.

However, to obtain optimum reception quality it is essential to install a good outdoor VHF dipole aerial. This is especially true of stereo broadcasts, which require an aerial voltage about ten times higher than for mono reception. Makeshift aerials will no longer be satisfactory in this case and will be no more than an expediency, especially in unfavourable reception areas, eg: in mountainous regions or in areas distant from the VHF transmitter. The outdoor dipole should be mounted as high as possible and should be free-standing on the roof.

The flat pin sockets 22 for aerials and earth are at the back of the set. The sockets marked  are for connecting a 300 Ω VHF dipole. The VHF outdoor dipole may be used not only for receiving VHF, but in case of necessity, also the AM wavebands (MW and LW), if the wire bridge between the flat pin sockets is inserted horizontally (see sketch on page 2). If two separate aerials are used for AM and VHF, the wire bridge should be inserted vertically between the flat pin sockets (one contact not connected). This ensures there will be no interaction between the two aerials.

The socket marked  is a high-inductance socket for an outdoor AM aerial. A 75 Ω aerial system can be connected to the coax socket 23. It can also be used for AM if the  AM aerial socket is connected by inserting the wire bridge horizontally (as above).

Your dealer is familiar with local reception conditions and will be pleased to advise you on a choice of aerial system and method of installation.

Switching On and Off

The tuner can be switched on and off with the POWER switch 1. The first time it is switched on, "FM 87.50 MHz HA" will appear in the alphanumeric display. On later occasions the frequency or identifying abbreviation of the station tuned to before the tuner was switched off will be displayed; however, for this to happen, the tuner must be left on the station concerned for at least 1/2 min. (indicated by the L.S.M. indicator 3 lighting up – see section entitled "L.S.M. Indicator").

Waveband Selection Buttons 11

These buttons select the required waveband (VHF, MW, or LW) for manual tuning or automatic station location.

FM = VHF	87.50 - 108 MHz
MW = Medium wave	522 - 1611 kHz
LW = Long wave	155 - 353 kHz

The waveband selected is shown in the extreme left-hand display 2.

Manual Tuning

The set can be tuned to stations manually with the group of buttons 12 marked "MANUAL TUNING". The frequency tuned to is shown in the display 3, and the appearance of the letters "HA" in the display 4 indicates the set is in the manual tuning mode. Muting, ie: suppression of inter-station noise during tuning, can be switched on with the MUTING button 13 ("MUTING" appears in the display 5).

● Pressing the DOWN button (4) reduces the frequency, while pressing the UP button (5) increases it. To change the frequency in single steps, quickly press and release the tuning button concerned (step size 25 kHz on VHF, and 1 kHz on MW and LW). If the button is held down the number of steps per second increases from 1.5 to 8. If the centre button (FAST) is also pressed, the rate of tuning is further increased to 20 - 27 tuning steps per second with steps of 100 kHz on VHF, 5 kHz on MW and 1 kHz on LW (in these circumstances muting is automatic and cannot be switched off).

● The TUNOSCOPE® indicator 7 provides an aid for precisely tuning the set to stations whose frequency is not known. When a VHF station is approached during tuning the red triangle on the right or left (depending on the direction of tuning) of the TUNOSCOPE will light up. The illuminated triangle indicates whether further tuning should be towards higher or lower frequency and consequently which of the tuning buttons 12 should be used. When tuning is correct, the green indicator in the TUNOSCOPE will light up.

Illumination of the two red LEDs or flickering of the TUNOSCOPE indicates that the fieldstrength of the station being received is too weak.

In the MW and LW bands only the green indicator lights up. This happens when a station of sufficient strength is being received on a centre frequency in the European 9 kHz frequency raster. This therefore provides a precise tuning aid since strong MW and LW stations often do not give a clear maximum reading on the signal-strength meter.

® Registered trade-mark

● The signal- or fieldstrength of any station tuned to is shown by the chain of LEDs 6, while the exact frequency of the station can be read off in MHz or kHz from the display 3 once the station has been precisely tuned to. In the case of VHF stations the third place after the decimal point is not shown in the display, but can be determined from the second decimal place because of the 25 kHz tuning raster, ie: .00(0), .02(5), .05(0), .07(5), etc.

FM Stereo Reception

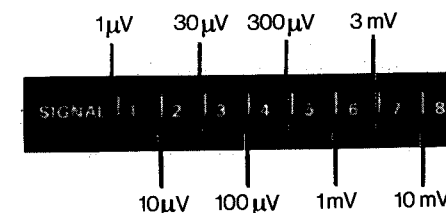
If a stereo broadcast is being received, the "FM-STEREO" will light up in the display 5. If the set is being manually tuned, it may, however, have been switched to mono ("FM-MONO" lit in display 5) and it will be necessary to press the MONO button 17 to receive stereo broadcasts in stereo. When the automatic station location system is used, the tuner is reset for stereo reception every time a change is made.

If stereo reception is subject to interference or noise, reception may be improved by switching to mono by pressing the MONO button 17.

VHF Fieldstrength Indicator

If several VHF transmitters carrying the same programme are received at different fieldstrengths, ie: the incoming strength is different this indicator can be used to determine which is the strongest, and the set tuned accordingly.

As a result of the sensitivity of the tuner, mono transmitters which are only slightly above the general noise level can give good reception.



The specified aerial input voltages are approx. values for 75 Ω impedance (for 300 Ω impedance the figures are doubled).

Noise-free reception of stereo transmitters however requires an aerial voltage which is approx. ten times higher than for mono transmitters. This is due to the system of stereo broadcasting used. The minimum aerial voltage with which this tuner can be operated is around 20 μ V. Below this figure the noise level will increase.

MUTING Button

If muting is switched on with MUTING button 13 ("MUTING" lit in display 5), the noise between stations during tuning is suppressed. The muting only stops when a station has been tuned to precisely (green TUNOSCOPE indicator lit up). It should be borne in mind that the muting system also mutes stations whose strength is below a certain threshold level to which the set is adjusted to in the factory.

Automatic Station Location (AUTO-SEARCH)

The automatic station location system scans the VHF band in 50 kHz steps, and the mediumwave and longwave bands in the 9 kHz raster. The exact frequency of any

station located with this system is shown in the display 3, while the green light in the TUNOSCOPE 7 indicates that the station is precisely tuned.

The chain of LEDs 6 indicates the signal- or fieldstrength of the station concerned. During automatic station location muting is automatic and cannot be switched off.

- Automatic station location is initiated by pressing and releasing one of the buttons 13 (◀ = decreasing frequency, ▶ = increasing frequency). In addition to the frequency, the letters "AS" (automatic search) appear in the display 4.

- Once the automatic station location system has found a station, it takes 5 secs. to check the reception quality, during which time "CH" appears in the display 4. If the reception is poor, the check procedure is interrupted and the automatic station location process automatically restarted ("AS" again appears in the display 4). If however, the station is suitable for reception a short check of the memory contents (Auto-Compare procedure) is made and the display 4 then shows "HA" (= manual tuning).

When Auto-Compare procedure is complete any of the following items may appear in the display:

- "NEW" will appear for 2 secs. in the display 3 if the station found has not already been entered in the memory.
- The station number (1 - 15) will appear in the display 4 for a short time if the frequency has already been entered in the memory.
- The station abbreviation will be shown in the display 3 if it has been entered in the memory in addition to the frequency shown.

Example:

97.90 MHz + BAY 3 has been stored under station number 4. Automatic station location is started, say, at 97 MHz and stops at 97.90 MHz.

Initial display:	97.90 MHz	"CH" displayed for 5 secs.
then	BAY 3	"4" displayed for 2 secs.
finally	BAY 3	"HA" displayed continuously.

If no abbreviation has been entered in the memory, the display will show 97.90 MHz throughout.

The automatic station location procedure can be stopped at any time, either by pressing one of the AUTO-SEARCH start buttons 15 or one of the tuning buttons 12 or a station button 10. At the end of the waveband the station location process does not stop automatically, but scans the waveband concerned again in the same direction. The system is designed for high reliability. A knurled knob is located between the two AUTO-SEARCH start buttons which can be used to match the station location sensitivity to the reception locations or aerials. If one wishes to receive weak stations, the knurled knob should be turned anti-clockwise. Turning the knob clockwise will increase the station location threshold and only strong stations will be tuned to. (Minimum and maximum values for the station location threshold, see specifications).

Presetting Stations

The tuner has a memory capable of storing up to 15 stations. The station positions can be selected with the station selection buttons 10 and the number of the position can be read in the display 4. If no station frequency has been entered for a given station position "FREE" will appear in the display 3 for a short time. Each of the station positions can be programmed for any station frequency in the VHF, MW or LW band, and in addition an abbreviation of the station name can be entered to help identify it. The latter will appear in the display 5 and not the frequency when the station is selected. For VHF stations it is also possible to preprogramme each station entered in the memory for mono or stereo (if it is broadcast in stereo).

- If a station has been found by tuning manually or with the automatic station location system and is to be entered in the memory, the STORE button 9 should first be pressed. The "STORE" will then light up in the display 5. The desired station number

is then selected by pressing the corresponding station button (group of buttons 10) and the station is then immediately entered in the memory. The station number is shown in the display.

- The memory is only ready to receive data if "STORE" is lit up in the display 5 (stays on each time for about 30 secs.). The storage procedure can be terminated before the 30 secs. has elapsed by pressing the STORE button 9 a second time or by selecting manual tuning or automatic station location.

- The abbreviation for the station eg: WDR 2 can either be entered in the memory at the same time as the station frequency or at a later date.

To enter the abbreviation proceed as follows: hold the small button 19 marked A - Z/0 - 9 down and press the DOWN or UP manual tuning button 12 until the first letter or number in the abbreviation appears in the extreme right-hand position in the display 3. Once the required symbol has been entered (in this example the letter "W"), it should be moved to the left by pressing the SHIFT

button 20 to make room for the next symbol (in this case "D"). The procedure is continued until all the required symbols have been entered (maximum four). In the symbols available there is a gap between 9 and A (or vice versa). To enter a gap in the abbreviation press the SHIFT button 20 twice in succession. If a mistake is made in the entry or a change is required, some or all of the symbols will have to be changed. Each time the SHIFT button 20 is pressed, the series of symbols moves one place to the left and the symbol on the extreme left is deleted. A new symbol can then be entered in the extreme right-hand position. Once the abbreviation for the station has been entered, it can be stored in the memory by first pressing the STORE button 9 and then the appropriate station button. When the station is selected the abbreviation will appear in the display. To check the frequency the display 3 can be switched to frequency by pressing the FREQ./NAME button 21.

- For VHF stations it is possible to enter in the memory whether a given station should be received in mono or stereo. After tuning the VHF station switch to MONO or STEREO ("FM-MONO" or "FM-STEREO" lit in the display 5) using the MONO button 17 and enter the information in the memory as described above. This can also be done at a later date. It is, of course, possible to change this programming later if required. The content of the memory is not affected if the mono switch is operated once the information has been entered in the memory.

- Station data can be transferred from one station position to another (together with the abbreviation for the station concerned and the mono/stereo information). As usual, the STORE button 9 has to be pressed before selecting the new station position. After the transfer the original station position retains its contents. However, it is possible to erase the contents of any station memory position so that if the position is selected "FREE" will appear in the display (see section entitled "FREE Function").

To summarise, the sequence of operations for entering the frequency, station abbreviation and mono/stereo information in a station memory position is as follows:

- 1) Tune to the station frequency,
- 2) Enter the abbreviation for the station and, if necessary, the stereo/mono information,
- 3) Press the STORE button ⑨,
- 4) Press the button (group of buttons ⑩) for the required station position.

The sequence for entering the abbreviation for the station and/or the mono/stereo information at a later date is as follows:

- 1) Select the station by pressing the pre-set station button (group of buttons ⑩),
- 2) Enter the station abbreviation and/or the mono/stereo information,
- 3) Press the "STORE" button ⑨,
- 4) Press the appropriate station button again.

FREE Function

To ensure that the station position has not yet been allocated before entering a station in the memory and therefore accidentally erasing a station previously allocated to the same station number, the FREE button ⑮ may be pressed to check which numbers are free or unallocated. Next to the word "FREE" in the display ③, the unallocated numbers will then appear in succession in the display ④ as long as the FREE button ⑮ is pressed. If all the station numbers have been allocated, the word "FULL" will appear in the display ③.

- If you wish to erase the data allocated to a station number, simply select the number concerned and press the STORE button ⑨ and the FREE button ⑮. The number will then become one of the unallocated ones (this can be checked by pressing the FREE button).

MEMORY-SCAN Buttons ⑭

These buttons can be used to select a pre-set station indirectly. The allocated numbers can be selected in sequence in the

downward (◀) or upward (▶) direction, free locations being skipped over automatically.

It is possible to go through the station memory positions in single upward or downward steps by quickly pressing and releasing buttons ⑭. If the buttons are held down, the display moves on to the next allocated station number every 2 secs.

COMP. Button ⑯

The COMP. ("COMPARE") button can be used to establish whether a station frequency which has just been tuned to has already been allocated to one or more of the station pre-set buttons. If so, the station numbers and their identifying abbreviations (if entered in the memory) can be read off in the display ④ while the COMP. button is held down. If, however, a frequency has not yet been entered in the memory, ie: if it is new, the word "NEW" will appear in the display ③. With the aid of this button it is therefore possible to avoid entering the same frequency under several station numbers.

- An example will now be given for the combined use of the auxiliary memory

functions. A station broadcasting on a frequency of 87.60 MHz is entered in the memory under the station numbers 9 and 2, in the latter case along with the abbreviation BAY 4. If you tune to 87.60 MHz manually and you would like to know whether this frequency has already been entered in the memory, press the COMP. button ⑯. The following information will then be shown alternately in the displays ③ and ④:

BAY 4	2	↔	87.60	9
-------	---	---	-------	---

This indicates that the station tuned to manually is Bayern 4 (4th Bavarian programme) and that it has already been entered in the station position 2 and also in the station position 9.

If you now wish to erase the data from station position 9, select it by pressing station button 9 (group of buttons ⑩), press the "STORE" button ⑨ and then the "FREE" button ⑮. The station position 9 will now be available for entering another station and will be included among the unallocated station numbers.

The L.S.M Indicator ⑧

L.S.M. stands for "Last-Station Memory" and the indicator can be used to ensure that if the set is switched off, a given or a preferred station tuned to manually or selected with the station selection buttons ⑩ will automatically be tuned to again when the unit is next switched on, even if a timer is used. If the L.S.M. indicator is lit when the set is switched off, the tuner has noted the last station tuned to.

● The following points should be noted:
The non-volatile RAM memory temporarily records even tuning data which is not entered in the memory with the "STORE" button ⑨. However, to allow the set to cope with the flow of data to the memory, the station must be tuned to for at least 30 secs. At the end of this period the L.S.M. indicator ⑧ comes on to indicate transfer is complete.

If you want a station to come back on when you next switch on, you must therefore remember to wait 1/2 min. until the L.S.M. indicator ⑧ comes on before you switch off.

Points to Note

The cabinet should only be cleaned with a soft cloth which picks up dust. No strong polishes or cleaning agents should be used. Do not expose the set to excessive heat or humidity.

(The German Post Office draws attention to the fact that the combined sound and TV reception licence only implies the right to set up and operate sound/TV receivers. Only transmissions by broadcast stations may be received and no others).

Technical data

Wavebands

VHF	87.50 - 108 MHz
Medium wave (MW)	522 - 1611 kHz
Long wave (LW)	155 - 353 kHz

Sensitivities

VHF mono: 0.5 μ V for 26 dB S/N ratio
(75 Ω , 40 kHz deviation).

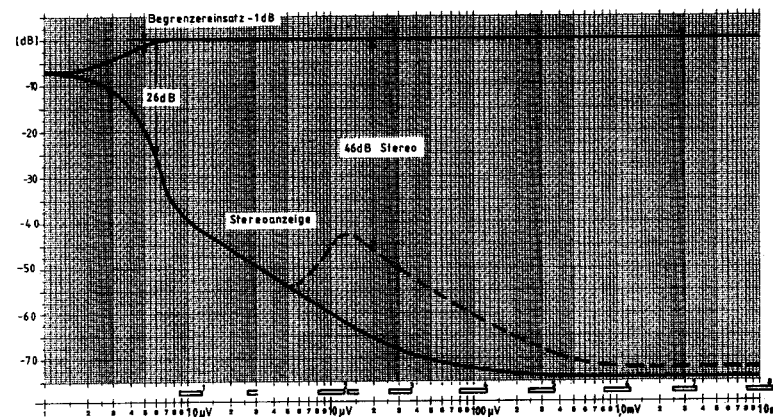
VHF stereo: 20 μ V for 46 dB S/N ratio
(75 Ω , 40 kHz deviation).
MW: 9.5 μ V } with aerial simulation
LW: 12 μ V }

Stereo switching threshold

Stereo on/off: 3.2/2.5 μ V into 75 Ω at 98 MHz

Muting threshold

2.5 μ V into 75 Ω at 98 MHz



**Unweighted FM
Signal-to-noise
Ratio**
as a function of
aerial voltage into
75 Ω (98 MHz,
40 kHz
deviation,
1 kHz f_{mod}).

FM self-seek threshold

Adjustable: min. $3\mu\text{V}$,
max. 2mV (75Ω)

AM self-seek threshold

Depending on FM self-seek threshold, adjustable:
MW min. $100\mu\text{V}$,
max. 10mV (75Ω)
LW min. $200\mu\text{V}$,
max. 20mV (75Ω)

Intermediate Frequencies

FM: 10.7 MHz
AM: 450 kHz

FM Limiting

Limiting point: $0.46\mu\text{V}$ into 75Ω for -1 dB , $0.34\mu\text{V}$ into 75Ω for -3 dB .

Bandwidth

FM - IF: approx. 130 kHz
AM - IF: approx. 4 kHz

IF Rejection Ratio

FM: $\geq 120\text{ dB}/75\Omega$
AM: $\geq 40\text{ dB}$

AM Suppression

$\geq 54\text{ dB}$ at 1 kHz , measured with 22.5 kHz deviation,
 30% AM modulation and 1 mV into 75Ω

Image Rejection

FM: $\geq 120\text{ dB}$
MW: $\geq 43\text{ dB}$
LW: $\geq 63\text{ dB}$

Capture Ratio

$\leq 1.5\text{ dB}$ for $-1\text{ dB}/-30\text{ dB}$ AF level at AF output
for 1 mV into 75Ω and 40 kHz deviation.

FM Signal-to-noise Ratio (Unweighted)

For 1 mV into 75Ω in the range $31.5\text{ Hz} - 15\,000\text{ Hz}$
at a nominal output voltage of 0.8 V , deviation
 40 kHz ,
Mono/stereo: $\geq 75/74\text{ dB rms}$
 $\geq 71/70\text{ dB DIN 45 405}$

FM Signal-to-noise Ratio (Weighted)

For 1 mV into 75Ω , with a nominal output voltage
of 0.8 V , and 40 kHz deviation
Mono/stereo: $\geq 79/76.5\text{ dB rms value, curve "A"}$
 $\geq 70.5/68\text{ dB DIN 45 405}$.

FM Stereo Frequency Response

From aerial to loudspeaker output
 $10\text{ Hz} - 16.8\text{ kHz}$ for -3 dB
 $20\text{ Hz} - 15\text{ kHz}$ for -1 dB

Pilot Tone Rejection

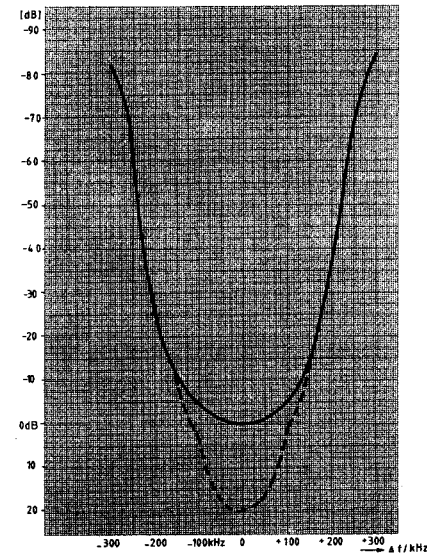
$\geq 63\text{ dB}$ for 19 kHz
 $\geq 80\text{ dB}$ for 38 kHz

Distortion

Mono: $\leq 0.09\%$, stereo $\leq 0.15\%$
for 1 kHz and 40 kHz deviation,
measured to DIN 45 500 at 1 mV into 75Ω

Dynamic Selectivity: Mono

$> 80\text{ dB}$ ($\pm 300\text{ kHz}$, for 40 kHz deviation, -30 dB
noise voltage)

**Dynamic Selectivity**

— Mono, wanted-signal transmitter $5\mu\text{V}/75\Omega$
--- Stereo, wanted-signal transmitter $100\mu\text{V}/75\Omega$
(Interfering transmitter 40 kHz deviation, $1\text{ kHz } f_{\text{mod}}$, at 30 dB
unweighted signal-to-noise ratio).

FM Crosstalk

1 mV aerial voltage, 47.5 kHz total deviation
 $10\text{ kHz} \geq 47\text{ dB}$
 $1\text{ kHz} \geq 48\text{ dB}$
measured with narrow bandpass

AF Output

150 mV for 7.5 kHz deviation
at the adjustable outputs if the AF level control is
in the centre lock-in position.

Level-Control Range

$+ 5.5\text{ dB}$ to -13 dB ($0\text{ dB} \triangleq$ AF level in centre
setting)

DIN Record Level

$0.87\text{ mV/k}\Omega$ at $\pm 40\text{ kHz}$.

Interference Immunity

To all European standards and IEC
recommendations.

Power consumption: 15 W max.

Due to our policy of continuing development the above figures are
subject to alteration without prior notice.